California Coastal Conservancy
Climate Change Policy

Pertinent Facts

A. The State Coastal Conservancy Act of 1976 (Division 21 of the Public Resources Code) establishes the State Coastal Conservancy (Conservancy) to work cooperatively to protect and restore natural resources, agricultural lands, and to provide public access to and along the coast.

B. The Legislature later amended the Conservancy's geographic and programmatic jurisdiction to include the entire nine-county San Francisco Bay Area, the protection of coastal and marine habitats, urban waterfronts, coastal watersheds, educational projects and programs, administration of the Ocean Protection Council, and implementation of the California Coastal Trail and the San Francisco Bay Area Water Trail Plan.

C. The Global Warming Solutions Act of 2006 (AB 32) declares that global warming poses a serious threat to the environment of California and requires California to reduce its total greenhouse gas (GHG) emission levels.

D. AB32, the Governor's Executive Orders S-3-05 (2005) and S-13-08 (2008), the Governor's Office of Planning and Research Technical Advisory dated June 18, 2008, and pending revisions to formal Guidelines for the California Environmental Quality Act (CEQA) all require that agencies consider global warming with respect to their proposed actions.

E. The Conservancy's *Strategic Plan 2007* identifies many effects that climate change will have on ocean, coastal and near-coastal resources, and the need to consider these impacts in determining the priority of expenditures in the design and siting of Conservancy-funded infrastructure projects; to support others in order to improve our understanding of the effects of climate change; and to identify tools to mitigate and plan for a range of predicted changes.

F. The California coast, ocean, and the San Francisco Bay area are experiencing documented adverse changes as a result of global warming, and climate scientists are predicting that these changes will accelerate, posing tremendous impacts and threats to the resources within the Conservancy's jurisdiction.

G. California's coastal, near shore, and marine resources are expected to experience dramatic physical, ecological, economic and social impacts due to predicted higher air and water temperatures, altered precipitation patterns, significant sea-level rise, salinity changes, more severe El Niño climate events, increased storm frequency and intensity, higher coastal erosion rates, greater fire intensity and frequency, increased ocean acidification, changes in ocean circulation and upwelling, saltwater intrusion into water sources for agriculture, and other changes.

H. Coastal and bay wetland habitats, already significantly altered and reduced in size due to human activities, are expected to be significantly affected by changes in climate-driven processes such as sea-level rise, fresh water flows, and sediment supplies.

I. Increased coastal erosion will likely reduce the lifespan of and threaten California's existing public and private facilities and structures, beaches and coastal habitats. Sea-level rise and other effects of climate change on the coast and ocean threaten California's $46 billion ocean-dependent economy.

J. Many Conservancy projects result in the protection of open space, restoration of urban areas, and development of multi-purpose trails which will help support efforts to implement transit-oriented, high-density development and reduce vehicle miles travelled and greenhouse gas emissions from transportation.

K. Agricultural protection projects are expected to be vulnerable to higher air temperatures and changes in water supplies, including from saltwater intrusion into groundwater sources.

L. The protection, restoration, and enhancement of habitats, ecosystem processes, and open space is essential to minimizing threats from global warming to California's biodiversity—an important part of the Conservancy's mission.

M. The coastal regions of the state are projected to have less severe temperature increases than inland regions, rendering the coastal region even more significant as a refuge for human use and overall biodiversity.

N. Protection of habitat inland and adjacent to tidal wetlands is essential for offsetting some wetland losses due to sea-level rise and changes in storm frequencies and intensities.

O. Many habitat restoration projects sequester carbon, an important factor in reducing the concentration of greenhouse gas emissions and slowing the rate of global warming.

P. The effects of climate change make adaptive management, coupled with monitoring of ecosystem processes, more important than ever to assure that non-climate related stressors are identified and addressed early on, to assure that management actions are effective or "do no harm," and to contribute toward the collective knowledge for use of scientists, managers, and the public.

In light of the Pertinent Facts, above, the Conservancy adopts the following climate change policies:

1. The Executive Officer is directed to consider climate change in evaluating which projects to fund and the manner in which projects are selected, in order to reduce vulnerabilities from climate change while continuing to support the resources (public access, open space, etc.) the Conservancy is charged with protecting.

2. Sea-level Rise and Extreme Ocean Events. ~~Prior to the completion of the National Academies of Science report on sea-level rise, consistent with Executive Order S-13-08, t~~ The Conservancy will consider flooding and erosion due to ~~the following~~ sea-level rise, and extreme events such as tsunamis ~~scenarios~~ in assessing project vulnerability and, to the extent feasible, reduc~~ing~~e expected risks and increase adaptive capacity using current scientific information and state guidance documents. ~~ing resiliency to sea-level rise:~~

   ~~a. 16 inches (40 cm) by 2050, and~~
   ~~b. 55 inches (140 cm) by 2100.~~

3. Collaboration to Support Adaptation Strategies. The Conservancy will collaborate with other agencies and entities to develop, support, and implement climate change adaptation plans, strategies and projects that minimize or offset impacts to natural resources, public access, and other matters specified in the Conservancy's enabling legislation.

4. Adaptation Strategies. The Conservancy encourages applications for climate-sensitive projects that include robust adaptation measures and strategies, including pilot or demonstration projects that are consistent with its enabling legislation, strategic plan, and available funding. These may employ innovative strategies for adaptation and mitigation of greenhouse gas emissions to minimize effects of climate change on natural resources and public access. Applications are encouraged for, but not limited to the following types of projects or project elements:

   a. ***Protection of Areas Adjacent to Shoreline Habitats*** in order to support the inland shift of habitats such as tidal wetlands, in response to sea-level rise;

   b. ***Regional Sediment Management*** to support restoration of natural sediment processes and beneficial reuse of dredge materials to enable tidal wetlands and other shoreline habitats to keep pace with sea-level rise;

   c. ***Setbacks, Rolling Easements and Planned Retreat*** which 1) relocate developments further inland or away from areas likely to be affected by flooding and erosion within the life of the structure, 2) remove development as hazards encroach into developed areas, or 3) facilitate landward movement of coastal ecosystems subject to dislocation by sea-level rise and other climate change impacts;

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d. ***Innovative Designs*** that incorporate features that are resilient to climate change impacts and can serve as demonstration projects;

e. ***Protection of Land*** for supporting native species in responding to climate change;

f. ***Protection of Open Space*** to protect existing and future habitat for species impacted by climate change and to support transit-oriented, high-density development in urban areas that minimize impacts to habitats and that help reduce greenhouse gas emissions from transportation;

g. ***Restoration of Urban Waterfronts and Urban Coastal Watershed Areas*** to support transit-oriented, high-density development, which help reduce greenhouse gas emissions from transportation;

h. ***Conservation, Restoration and Enhancement of Habitats that Sequester Carbon***, including forests, tidal wetlands, and estuarine scrub/shrub habitats;

i. ***Development of Multi-use Trails*** that connect communities, provide access to and along the coast, and help reduce vehicle miles travelled;

j. ***Management of Invasive Species***, especially projects which prevent introduction or spread of invasive species, in order to reduce the impacts of this major stressor on biodiversity;

k. ***Riparian Protection, Enhancement, and Restoration Projects*** that allow for wider riparian corridors to accommodate increased flooding, or provide other benefits such as increased shading to moderate water temperature increases;

l. ***Acquisition Planning Projects*** that apply the latest information on climate change impacts and recommendations on reserve design, to identify wildlife migration corridors and natural lands that have a diversity of topography, soils and microclimates, to maximize the survival of native species and biodiversity and preserve ecosystem processes;

m. ***Adaptive Management and Monitoring*** of ecosystem and physical processes to support implementation of management actions to achieve project objectives under rapidly-changing climatic conditions; and

n. ***Living Shoreline Projects*** which restore and enhance nearshore and tidal habitats such as tidal wetlands, eelgrass and native oysters, to promote sedimentation and protect against shoreline erosion.

5. Climate Change Research. When appropriate and consistent with the Conservancy's enabling legislation and available funding sources, the Conservancy will support priority research projects that are targeted to increasing understanding of climate change

impacts to coastal and bay resources, support vulnerability assessments, quantify carbon sequestration benefits of habitat enhancement and restoration projects, and that demonstrate the effectiveness of applied management strategies.

6. Education, Outreach and Guidance. To the extent feasible with staffing and funding limitations, the Conservancy will collaborate with others to provide current information and guidance to grantees on the latest relevant climate change information and best management practices.

7. Greenhouse Gas Emissions. Conservancy staff will work with applicants to identify, evaluate, and incorporate reasonable measures to reduce the greenhouse gas emissions of Conservancy-funded projects. The Conservancy will encourage use of best management practices and innovative designs that reduce greenhouse gas emissions and, as possible will support the development of such practices and designs through funding and other actions.

8. Carbon Reduction and Offsets. Conservancy staff will continue to measure, verify and report its overall greenhouse gas emissions with the goal of reducing them; and will explore opportunities to offset emissions from Conservancy operations. The Conservancy will require grantees to obtain the approval of the Executive Officer prior to sale of carbon credits on land for which the Conservancy provided funding to purchase, restore, enhance, or develop.

9. Transportation. Conservancy staff will, where feasible, attempt to reduce their work-related greenhouse gas emissions from travel, through the use of public transportation, carpooling, bicycling, use of low fuel vehicles, clustering meetings and events, and using phone- and web-based conferencing technologies.